

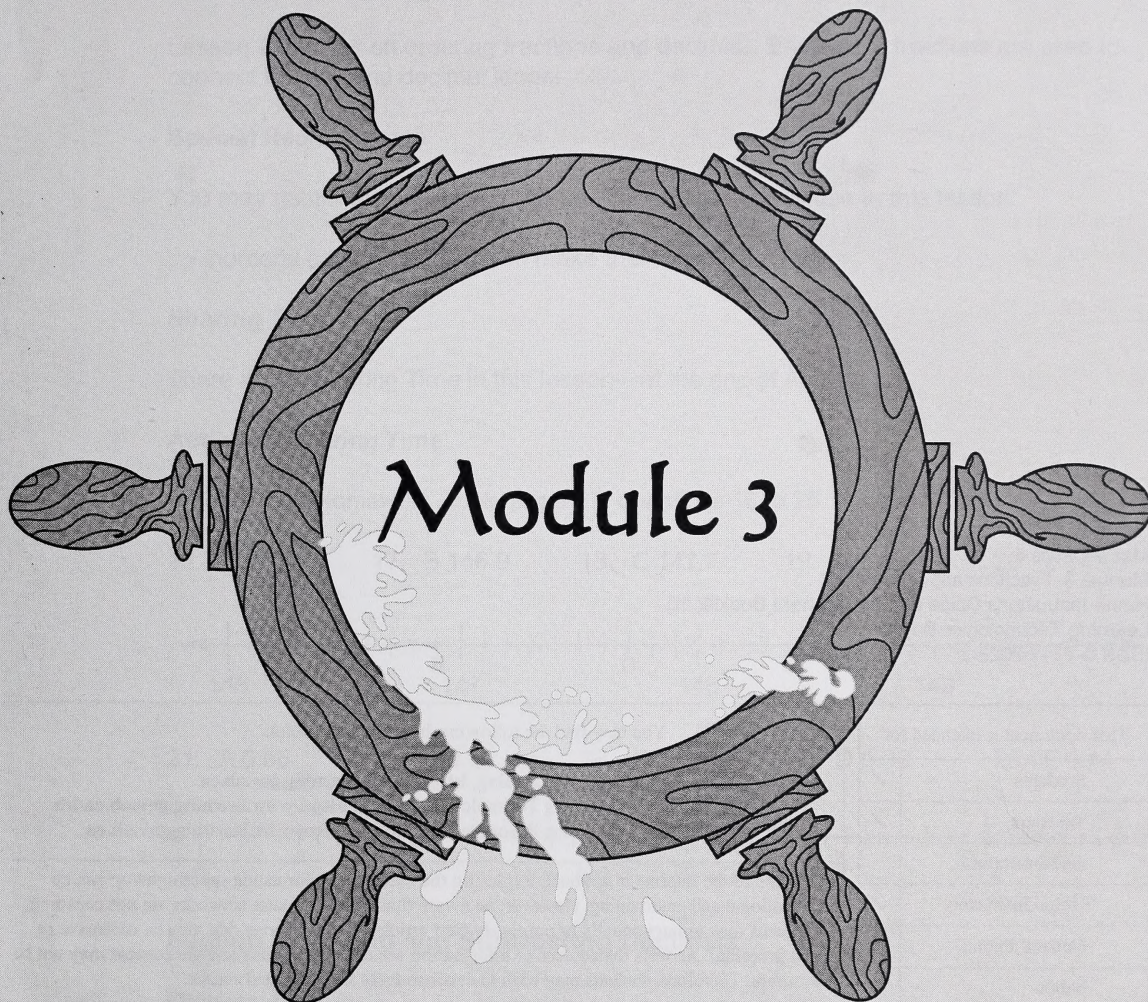
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# Mathematics 5



## Home Instructor's Guide and Assignment Booklet 3B



Learning  
Technologies  
Branch

**Alberta**  
LEARNING



Mathematics 5  
Module 3: Fractions and Decimals  
Home Instructor's Guide and Assignment Booklet 3B  
Learning Technologies Branch  
ISBN 0-7741-2028-2

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



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- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/ltb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

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## Lesson 4: Comparing and Ordering Fractions and Decimals

### Overview

Lesson 4 focuses on ordering fractions and decimals. Equivalent fractions are used to connect fraction and decimal ideas.

### Special Requirements

You may gather the following materials for your student to use in this lesson:

- numeral cards (Students can make their own.)

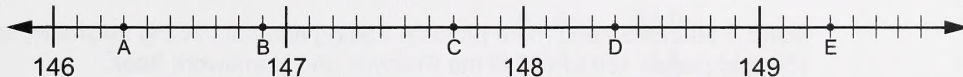
### Sharing Time

There is one Sharing Time in this lesson—at the end of Activity 3.

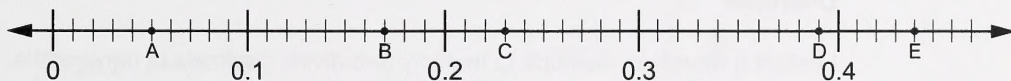
### Activity 3 Sharing Time

Practice and Homework Book, page 57, questions 16 to 25

16. A 146.3      17. B 146.9      18. C 147.7      19. D 148.4      20. E 149.3



21. A 0.05      22. B 0.17      23. C 0.23      24. D 0.39      25. E 0.44



## Lesson 5: Adding and Subtracting Decimals

### Overview

Lesson 5 extends addition and subtraction of decimals to hundredths. These operations are used to solve problems.

### Special Requirements

You may gather the following materials for your student to use in this lesson:

- base ten blocks
- play money (Students can make their own.)



**Sharing Time**

There is one Sharing Time in this lesson—at the end of Activity 3.

**Activity 3 Sharing Time**

Practice and Homework Book, page 61, questions 1 to 3. Answers will vary depending on the items selected. Following is one sample response.

My Order	
Green Salad	$\begin{array}{r} 1\ 3 \\ 1.29 \end{array}$
Roll	$0.49$
Soup	$2.49$
Coffee	$\begin{array}{r} 1.29 \\ \hline \end{array}$
Total:	$\$5.56$
Change from \$10:	$10.00$
	$\begin{array}{r} 5.56 \\ \hline 4.44 \end{array}$

**Note:** If students need more practice adding and subtracting decimals, see pages 156 to 158 and pages 160 to 162 of the Practice and Homework Book.

**Lesson 6: Multiplying and Dividing Decimals****Overview**

Lesson 6 develops methods to multiply and divide decimals to hundredths. These operations are used to solve problems.

**Special Requirements**

You may gather the following materials for your student to use in this lesson:

- base ten blocks
- play money (Students can make their own.)

**Sharing Time**

There is one Sharing Time in this lesson—at the end of Activity 3.

**Activity 3 Sharing Time**

Practice and Homework Book, page 65, questions 1, 2, 6, and 7

**1. Estimate**

$$6.7 \times 6 \div 7 \times 6 \\ \div 42$$

**Exact Answer**

$$\begin{array}{r} 6.7 \quad \text{or} \quad \overset{4}{6.7} \\ \times 6 \\ \hline 6 \times 6 = 36.0 \\ 6 \times 0.7 = 4.2 \\ \hline 40.2 \end{array}$$

**2. Estimate**

$$16.4 \times 9 \div 16 \times 10 \\ \div 160$$

**Exact Answer**

$$\begin{array}{r} 16.4 \quad \text{or} \quad \overset{5}{16.4} \\ \times 9 \\ \hline 9 \times 10 = 90.0 \\ 9 \times 6 = 54.0 \\ 9 \times 0.4 = 3.6 \\ \hline 147.6 \end{array}$$

**6. Estimate**

$$25.2 \times 6 \div 24 \div 6 \\ \div 4$$

**Exact Answer**

$$\begin{array}{r} 4.2 \\ 6 \overline{)25.2} \\ \underline{24} \phantom{0} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

**7. Estimate**

$$7.8 \div 3 \doteq 6 \div 3 \\ \doteq 2$$

**Exact Answer**

$$\begin{array}{r} 2.6 \\ 3 \overline{) 7.8} \\ \underline{6} \phantom{0} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

**Note:** If students need more practice, see pages 164 to 166 and pages 168 to 170 of the Practice and Homework Book.

**Module Summary**

In the Module Summary students are asked to complete the Numbers in the News Project and send the completed project with Assignment Booklet 3B to the teacher.

Following the Module Summary are Keystrokes and Review. These special activities can be assigned at a later time to review the module ideas and prepare for the final test.



## ASSIGNMENT BOOKLET 3B

### Mathematics 5

Module 3: Lessons 4 Assignment, Lesson 5 Assignment, Lesson 6 Assignment, and Numbers in the News

**Home Instructor's and Student's Comments:**

**STUDENT FILE NUMBER**  
(if label is missing or incorrect)

\_\_\_\_\_

Date Submitted:

\_\_\_\_\_

**Apply Module Label Here**

**Name**

**Address**

**Postal Code**

*Please verify that preprinted label is for  
correct course and module.*

#### FOR SCHOOL USE ONLY

Assigned Teacher:

\_\_\_\_\_

Date Assignment Received:

\_\_\_\_\_

Grading:

\_\_\_\_\_

**Teacher's Comments**

\_\_\_\_\_  
**Teacher's Signature**

**Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.**

# INSTRUCTIONS FOR SENDING IN THIS DISTANCE LEARNING ASSIGNMENT BOOKLET

When you register for distance learning courses, you are expected to send in Assignment Booklets for corrections regularly. Try to send each Assignment Booklet as soon as you have completed it. Before sending your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

## MAILING

### 1. Postage Regulations

Do **not** enclose letters with Assignment Booklets.

**Send all letters in a separate envelope.**

### 2. Postage Rates

**Take your Assignment Booklet to the post office and have it weighed. Attach enough postage** and seal the envelope. Assignment Booklets will travel faster if correct postage is used and if they are in large envelopes that are no more than two centimetres thick.

## FAXING

1. Assignment Booklets may be faxed. Contact your teacher for the fax number.
2. All faxing costs are the responsibility of the sender.

## E-MAILING

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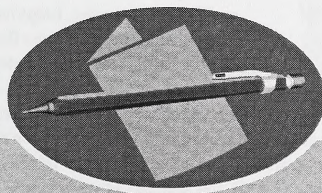


# **Mathematics 5**

## **Module 3**

### **Fractions and Decimals**

#### **ASSIGNMENT BOOKLET 3B**



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LEARNING



## FOR TEACHER'S USE ONLY

### Summary

	Total Possible Marks	Your Mark
Lesson 4 Assignment	13	
Lesson 5 Assignment	12	
Lesson 6 Assignment	12	
Numbers in the News	10	
	47	

### Teacher's Comments

Mathematics 5

Module 3: Fractions and Decimals

Assignment Booklet 3B

Lesson 4 Assignment, Lesson 5 Assignment, Lesson 6 Assignment, and Numbers in the News

Learning Technologies Branch

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## ASSIGNMENT BOOKLET 3B

### MATHEMATICS 5—MODULE 3: FRACTIONS AND DECIMALS

Your mark on this module will be determined by how well you do your assignments in the Assignment Booklets.

Work slowly and carefully. If you are having difficulties, go back and review the appropriate lessons.

There are three lesson assignments and a Numbers in the News project in this Assignment Booklet. The total of these assignments is 47 marks. The value of each assignment is stated in the left margin.

Be sure to proofread each assignment carefully.

13

#### Lesson 4 Assignment: Comparing and Ordering Fractions and Decimals

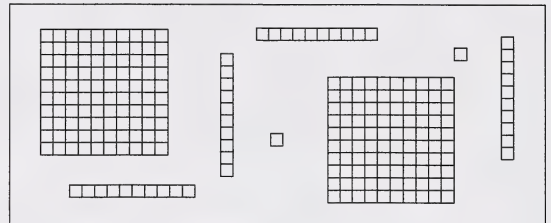
1. Use the fraction strips from Activity 3 of Lesson 1 in this module to represent each of the following fractions and place them in order of increasing size:  $\frac{5}{6}$ ,  $\frac{2}{3}$ ,  $\frac{3}{8}$ ,  $\frac{2}{4}$ .

2

- a. Draw pictures that show how you compared your strips.

- ② b. Write the fractions in order of increasing size, using the less than ( $<$ ) sign.

2. The base ten blocks in the diagram can be used to represent decimals. A flat represents 1, a rod represents 0.1 units, and a small cube represents 0.01.



- ⑤ a. Write all the decimals you can show using any four of the base ten blocks in the diagram above.

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- ② b. How can you be sure you have all the possible numbers?

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- ② c. Write the numbers from least to greatest, using the less than ( $<$ ) sign.

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12

Lesson 5 Assignment: Adding and Subtracting Decimals

You just got a gift of three goldfish from your grandmother and she gave you \$20.00 to buy a bowl, a bowl ornament, and a supply of fish food. The chart below shows the prices of these items at three different stores.

		Store		
Item		Pet Zoo	Pampered Pets	John’s Animals
	Bowl	\$7.00	\$6.00	\$8.00
	Ornament	\$8.50	\$8.00	\$4.75
	Fish Food	\$5.50	\$4.50	\$5.25

1

1. Explain how you can estimate the total cost of the most expensive combination of the three items.

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1

2. Explain how you can estimate the total cost of the least expensive combination of the three items.

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- 8
3. Find four different ways you could buy the three things and spend \$20 or less. Show each combination, the total cost, and how much change you would receive.

Bowl	Ornament	Fish Food	Total Cost	Change

- 2
4. If you had to buy all three items at the same store, at which of the stores could you shop?
-



12

## Lesson 6 Assignment: Multiplying and Dividing Decimals

For each of the following questions, write a word problem, explain how you would estimate the answer, and solve the problem. Show your work.

3

1.  $13.6 \times 7$

Word problem: \_\_\_\_\_

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Estimate:

Solution:

③

**2.**  $4 \times 361.59$

Word problem: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Estimate:

Solution:



③

3.  $23.4 \div 6$ 

Word problem: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Estimate:

Solution:

③

4.  $42.16 \div 5$ 

Word problem: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Estimate:

Solution:

## 10

**Numbers in the News**

Go through the scavenger hunt list for Module 3 to make sure you have clipped at least one example for each question. Ask your home instructor to check the samples you found. Choose the sample you wish to use, and label one with the scavenger hunt number it matches. Organize your samples and put them together with any other information required. Submit your project with this Assignment Booklet.

Ask yourself the following questions:

- Is my Numbers in the News project complete? (Have I included all my samples?)
- Do my samples show the ideas clearly? (Are my examples appropriate?)
- Did I take care to be neat when organizing and labelling my work?



## Numbers in the Tens

On a number line, the numbers 10 and 20 are marked. The number 15 is marked halfway between 10 and 20. The number 12 is marked between 10 and 15. The number 18 is marked between 15 and 20. The number 14 is marked between 12 and 15. The number 16 is marked between 15 and 18. The number 13 is marked between 12 and 14. The number 17 is marked between 16 and 18. The number 11 is marked between 10 and 12. The number 19 is marked between 18 and 20. The number 10 is marked at the beginning of the number line. The number 20 is marked at the end of the number line.

Ask students the following questions:

- Is my number in the tens place? (If yes, write the number.)
- Do my digits show the tens place? (If yes, write the number.)
- (If I have a 10 in the tens place, what is the number?)





